



REMARKS

Claims 1 – 10, 12 – 16, 18 – 26, 28, 30 – 39, 42, 44 – 55, 57, 59, 61, 65, and 66 are pending in the application. Claims 1 – 5, 10, 12 – 16, 18, 22 – 26, 28, 30 – 33, 36, 38 – 39, 42, 44 – 48, 51, 53 – 55, 57, 59, 61 and 65 - 66 have been amended. Claims 12 – 14, 36, 38, 39, 51, 53 and 54 were objected to due to minor informalities. The claims have been amended to address the objections of the Examiner. Claims 67 – 68 have been presented. No new matter has been added.

The Applicant reserves the right to prosecute, in one or more patent applications, the canceled claims, the claims to non-elected inventions, the claims as originally filed, and any other claims supported by the specification. Any amendments made to the claims herein were made solely to expedite and facilitate prosecution and were not made nor should they be construed to have been made to overcome any issue of unpatentability of the claims prior to amendment or in acquiescence of the Examiner's rejections to the claims.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 1-10, 12-16, 18-26, 28, 30 – 39, 42, 44 – 55, 57, 59, 61, 65 and 66 were rejected under 35 U.S.C. § 112, first paragraph as allegedly containing which was not described in the specification in such a way as to reasonably convey to one skill in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse the Examiner's rejection for lack of an adequate written description under 35 U.S.C. 112, first paragraph.

It is submitted that Applicants have provided the nucleic acid sequences for several fiber specific promoters, including the 4-4, rac13, rac9 and ltp promoters. As noted in prior responses, these sequences were shown to have preferred expressed in cotton fiber (see, inter alia, pages 31, lines 1 – 3 and lines 22 - 25; page 32, lines 7 – 12; and page 32, line 21 – page 33, line 6). Moreover, the portions of the sequences which correspond to the promoter are provided for the 4-4 promoter in Example 5 and for the rac13 promoter in Example 6. Further, as noted by the

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previous Examiner (see Office Action dated January 27, 2000, page 3, line 25), the promoter regions of the two 4-4 genes are apparently identical (nucleotides 65 – 4163 of SEQ ID NO: 7 and nucleotides 57-4155 of SEQ ID NO:11). As for the rac13 promoter, the sequence is provided in SEQ ID NO:15. As such, it is submitted that the Applicants have provided an adequate written description of the claimed promoter sequences.

Claims 1-10, 12-16, 18-26, 28, 30 – 39, 42, 44 – 55, 57, 59, 61, 65 and 66 were rejected under 35 U.S.C. § 112, first paragraph, because the specification is allegedly enabling only for claims limited to the 4-4 promoter of pCGN5148, pCGN5149, and pCGN5616, as well as vectors, plant cells, and plants comprising said promoter operably linked to a coding sequence, and a method of modifying fiber color by transformation with said promoter operably linked to a DNA encoding tyrosinase, tryptophanase or indole oxygenase. The Examiner alleges that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. This rejection is respectfully traversed.

It is submitted that the specification is enabling for the claims as originally presented. In particular, Applicants have described several promoter sequences which direct expression in fiber. In addition, Applicants have provided several examples that detail the use of an exemplary promoter to express several genes in fiber cells. As such, it is submitted that one of skill in art would be able to use the disclosed promoter sequences in combination with these or other genes for expression of such genes cotton fiber cells.

Therefore, since, at most, only routine experimentation would be required to utilize the promoter sequences provided by the Applicants to express genes whose expression in fiber cells would be desirable, it is submitted that the rejections under 35 U.S.C. 112, 1st paragraph should be withdrawn.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 1- 10, 12 – 16, 18 – 26, 28, 30 – 39, 42, 44 – 55, 57, 59, 61, 65 and 66 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the

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invention. Claims 1 – 10, 12 – 13, 15 – 16, 18 – 26, 28, 30 – 39, 42, 44 – 55, 57, 59, 61, 65 and 66 have been amended to clarify the scope of the claims to the Examiner. It is submitted that all of the issues raised by the Examiner in regard to these claims have been addressed. As to claim 14, it is submitted that the Applicants have provided a definition and examples of what is meant by “modifying fiber phenotype”. In light of the above, it is respectfully requested that the rejections under 35 U.S.C. 112, second paragraph be withdrawn.

Rejections under 35 U.S.C. § 102 and 35 U.S.C. § 103

Claims 1, 7, 9, 12, 13, 28, 34, 36 – 39, 42, 44, 49, 51 – 55, 57 and 59 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by John et al. (PNAS 89:5769-5773, 1992). Claims 1, 7, 9, 12, 13, 28, 34, 36 – 39, 42, 44, 49, 51 – 55, 57 and 59 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by John et al. (US Patent 6,096,950). These rejections are respectfully traversed.

Claims 1 – 10, 12, 13, 28, 30 – 39, 42, 44 – 55, 57 and 59 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over John et al. (PNAS 89:5769-5773, 1992). Claims 1 – 10, 12 – 16, 18 – 22, 28, 30 – 39, 42, 44 – 55, 57 and 59 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over John et al. (US Patent 6,096,950). These rejections are respectfully traversed.

It is submitted that John et al. fails to teach or suggest the claimed sequences and the methods for modification of fiber phenotype as claimed. However, claims 1, 44, 57 and 59 have been amended with respect to the hybridization language. As such, it is respectfully requested that the rejections under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) be withdrawn.

As to claims 23 – 26, 61, and 65 – 66, Applicants acknowledge that the Examiner has indicated that these claims are free from the cited prior art.

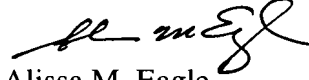
In light of the above arguments and amendments, it is submitted that all of the pending claims are in condition for full and complete allowance and therefore, such action is respectfully requested.

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If there are any issues or amendments the Examiner wishes to discuss, she is encouraged to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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